REMARKS

Claims 1-8 are pending and stand rejected.

PRIORITY APPLICATION

As indicated in Form PCT/IB/304, a certified copy of the priority application was received by the International Bureau on November 5, 2001 and therefore should have been forwarded to the PCT branch of the PTO. Accordingly, the Examiner may obtain a certified copy of the priority application from the PCT branch of the PTO.

DRAWINGS

The Examiner has not indicated on the Office Action Summary that the formal drawings filed on February 20, 2002 are accepted. Therefore, applicant respectfully requests acknowledgement of the drawings in the next communication from the Examiner.

CLAIM REJECTIONS – 35 USC § 103

Claims 1-8 are rejected under 35 USC § 103(a) as being obvious over Azuma (US Patent No. 5,631,532) in view of Kawatsu (US Patent No. 5,712,052). Applicants traverse this rejection for the following reasons.

As stated by the Examiner in the outstanding Office Action, Kawatsu teaches a sensor (1) that detects a toxic substance contained in the air supplied by an air feeder. (See lines 12-13, page 3 of the Office Action). The sensor (1) of Kawatsu, however, is provided between the reformer 216 and fuel cell 210 and the sensor (1) detects the carbon monoxide concentration in the hydrogen rich gas which is generated by the reformer 216 (See Fig. 1 and lines 51-67, column 6 of Kawatsu).

In contrast to the present invention, the sensor (1) of Kawatsu does not detect "a toxic substance contained in the air supplied by the air feeder." Therefore, Kawatsu completely fails to disclose the toxic substance sensor of the present invention.

Azuma also fails to disclose such a toxic substance sensor. Azuma merely discloses a conventional hybrid vehicle which charges a battery using power generated by a fuel cell in accordance with a charge state of the battery when the vehicle is in standstill.

Kawatsu detects the carbon monoxide concentration in the hydrogen rich gas as mentioned above and increases air supply amount such that the carbon monoxide concentration falls when the detected carbon monoxide concentration becomes high. Further, the third embodiment of Kawatsu detects the carbon monoxide concentration at the inlet and outlet of the fuel cell, and increases or decreases the air supply amount to the reformer according to the detected carbon monoxide concentration (Fig. 8, line 41, column 15-line 26, column 16).

Although Kawatsu stops the fuel cell when the carbon monoxide concentration becomes high, this stoppage is performed when it is determined difficult to continue the operation of fuel cell or it is determined that there is no hope of recovery from catalyst poisoning due to high carbon monoxide concentration.

In contrast, the present invention stops the fuel cell based on the result of detecting the toxic substance and the battery charge state such that (1) the poisoning of fuel cell due to the toxic substances in the supply air and (2) the shortage of supply power are both prevented This prevents the performance of the fuel cell from failing due to a toxic substance without reducing the running performance of the fuel cell vehicle.

As stated above, the cited references fail to disclose "a sensor which detects a toxic substance contained in the air supplied by the air feeder." Therefore, the Examiner has not established a *prima facie* case of obviousness because the combination of the cited references do not teach or suggest all of the elements of the claims.

Furthermore the cited references do not mention the idea to stop the fuel cell for preventing the poisoning fuel cell and shortage of power supply and therefore fail to provide

motivation to arrive at the present invention. Thus, the present invention is not obvious over the combination of Kawatsu and Azuma and the outstanding rejection should be withdrawn.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

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